D Congress, 2 Session. } HOUSE OF REPRESENTATIVES. { Document No. 352.

MUSKEGON HARBOR, MICH.

LETTER

FROM

IE SECRETARY OF WAR,

TRANSMITTING,

I A LETTER FROM THE CHIEF OF ENGINEERS, REPORT ON AMINATION OF MUSKEGON HARBOR, MICH., WITH A VIEW CLOSING THE GAP IN THE SOUTH REVETMENT.

BER 2, 1913.—Referred to the Committee on Rivers and Harbors and ordered to be printed, with illustration.

War Department,
Washington, December 1, 1913.

Speaker of the House of Representatives.

: I have the honor to transmit herewith a letter from the Acting of Engineers, United States Army, dated 28th ultimo, together copy of report from Lieut. Col. J. C. Sanford, Corps of Engi-, dated September 16, 1913, with map, on preliminary examina-of Muskegon Harbor, Mich., made by him in compliance with rovisions of the river and harbor act approved March 4, 1913.

Very respectfully,

Lindley M. Garrison,
Secretary of War.

War Department,
Office of the Chief of Engineers,
Washington, November 28, 1913.

: The Chief of Engineers, United States Army.
The Secretary of War.
ect: Preliminary examination of Muskegon Harbor, Mich.

There is submitted herewith for transmission to Congress report September 16, 1913, with map, by Lieut. Col. J. C. Sanford, s of Engineers, on preliminary examination of Muskegon Har-

bor, Mich., with a view to closing the gap in the south revetr called for in the river and harbor act approved March 4, 1913.

2. Muskegon Harbor is on the east shore of Lake Michigan, dis by water about 12 miles from Grand Haven Harbor. The exis project, adopted in 1902, provides for a channel 300 feet wide 20 feet deep from Lake Michigan to Muskegon Lake, protecte piers and revetments constructed under earlier projects. The dis officer states that there is a break in the alignment of the s revetment where the private revetment belonging to the Pere M quette Railroad Co. and forming the car ferry slip is set back f the adjacent Government revetment. The railroad revetment i poor condition, and the closing of the gap is apparently desired the protection of the highway running along the bank. The dis officer states that the closing of the gap would be very expensive, the work is not needed in the interests of navigation. He is of o ion that the locality is not worthy of improvement by the Ger Government at the present time. In this opinion the division e neer concurs.

3. This report has been referred, as required by law, to the B of Engineers for Rivers and Harbors, and attention is invited t board's accompanying report, dated October 28, 1913, concurrin the views expressed by the district officer and the division engine

4. After due consideration of the above-mentioned reports I cur in general with the views of the district officer, the division e neer, and the Board of Engineers for Rivers and Harbors, and th fore, in carrying out the instructions of Congress, I report that improvement by the United States of Muskegon Harbor, Mich., a view to closing the gap in the south revetment, in the ma apparently desired by the interests concerned, as described in reports herewith, is not deemed advisable at the present time.

EDW. BURR,
Colonel, Corps of Engineers,
Acting Chief of Enginee

REPORT OF THE BOARD OF ENGINEERS FOR RIVERS AND HARB

[Third indorsement.]

BOARD OF ENGINEERS FOR RIVERS AND HARBORS,
October 28, 191

To the CHIEF OF ENGINEERS, UNITED STATES ARMY:

This examination of Muskegon Harbor, Mich., has been called "with a view to closing the gap in the south revetment." The e ing project, adopted in 1902, provides for a channel 300 feet wide 20 feet deep from Lake Michigan to Muskegon Lake, protecte jetties and revetments. There is, in addition to the Governmen vetment on the south side of the channel, a piece about 650 fe length belonging to the Pere Marquette Railroad Co., at which p is located a car ferry slip, not now in use. This railroad revet is not in alignment with the two pieces of Government revetm but is set back and forms a bight, or, as it is referred to in the of law, a "gap." The railroad revetment is in poor condition,

ghway running along the bank in close proximity thereto is being ermined, and apparently the closing of the so-called gap is de- l for the protection of this road.

he district officer says that it is not advisable to close the gap, the work would be very expensive, that the present bight should etained on account of the enlargement in the waterway being of ntage in reducing wave force, and that the railroad company ld only allow this improvement under conditions which would be desirable. He states that the revetment should be repaired he interests of the railroad and of the city of Muskegon, but that gation interests are not now affected and are not likely to be ss the revetment is breached, and even then it is not certain that additional cost of maintenance by the rebuilding of the revetment ld not be more than by other means. He expresses the belief that city authorities could secure permission from the railroad com- to make such repairs as are necessary to protect the highway. regards the locality as unworthy of improvement by the United es, and in this view the division engineer concurs.

terested parties were advised of the unfavorable tenor of the ict officer's report and given an opportunity of submitting their s to the board, but no communications on the subject have been ived.

seems clear from the facts presented that the improvement con- plated is not necessary or desired in the interests of commerce navigation, and that any advantages that might result therefrom ld be local in character and not for the benefit of the general lic. The board therefore reports, in concurrence with the views he district officer and the division engineer, that it is not advis- for the United States to undertake the improvement of Muske- Harbor, Mich., with a view to closing the gap in the south revet- t.

compliance with law, the board reports that there are no ques- s of terminal facilities, water power, or other related subjects ng any material bearing upon the improvement of navigation at locality.

or the board:

W. M. BLACK,
Colonel, Corps of Engineers,
Senior Member of the Board.

PRELIMINARY EXAMINATION OF MUSKEGON HARBOR, MICH.

UNITED STATES ENGINEER OFFICE,
Grand Rapids, Mich., September 16, 1913.

m: The district engineer officer.
The Chief of Engineers, United States Army (through the divi- on engineer).
ject: Preliminary examination of Muskegon Harbor, Mich.

In compliance with department letter of March 18, 1913, the fol- ing report is submitted on the preliminary examination of Muske- Harbor, as required by the river and harbor act of March 4, 1913,

"Muskegon Harbor, Mich., with a view to closing the gap in t south revetment":

The locality is shown on Lake Survey Charts No. 88 (Coast Ch No. 8) and No. 767 (Muskegon Harbor). A tracing is inclosed wh shows a vicinity sketch, the harbor entrance, the details of the porti of the harbor channel in question, and a portion of the original p of the village of Laketon covering all the lands in question. F photographs taken May 28, 1913, showing various views of the c ferry slip, the eroded area and wagon track in rear, and the adjoini portions of the United States revetments at each end, are inclosed.

2. Muskegon Harbor is on the east shore of Lake Michigan, dist by water about 12 miles from Grand Haven Harbor on the south a $11\frac{1}{2}$ miles from White Lake Harbor on the north, and is the outlet Muskegon River, which drains a watershed of about 2,663 squ miles. At its mouth the river expands into Muskegon Lake, a body water about 5 miles long and from 1 to 2 miles wide, with gene depths of from 30 feet to 40 feet. At the easterly end of the lake the city of Muskegon, with a population of about 25,000; it is the t minus of a branch of the Grank Trunk Railway and a branch of Grand Rapids & Indiana Railroad. A branch of the Pere Marque Railroad passes through the city. The commercial piers for wat borne commerce are at the city of Muskegon. At the westerly end the lake is the Government improvement, consisting of a channel p tected by piers and revetments from deep water in Lake Michigan deep water in Muskegon Lake. The length of the north pier and vetment is about 5,250 feet and of the south pier and revetment ab 4,710 feet, in addition to about 650 feet belonging to the Pere M quette Railroad Co. and forming a car-ferry slip. This car-ferry s was used in former years, but is now abandoned. The tracks of t railroad extend from the city of Muskegon around the southerly s of Muskegon Lake and terminate at this car-ferry slip.

3. In 1867, before operations were begun by the United Stat there was a channel about 11 feet deep. The original project v adopted in 1866 and amended a number of times up to 1892. The isting project, adopted in 1902, provides for a channel 300 feet w and 20 feet deep from Lake Michigan to Muskegon Lake, and been completed with the exception of 550 feet of pier extension—2 feet to the north and 200 feet to the south pier; but this pier ext sion has been deferred for the present, and entrance depths are ma tained by dredging alone. The channel depths are in excess of requirements of the vessels using this harbor. The fluctuation water surface is that of Lake Michigan, and at present the maxim height, which occurs in summer, is about 0.5 foot below the mean l level (for years 1860–1875, 581.63 feet above mean tide at New Y City); the lowest stage, which occurs in winter, is about 2 feet bel mean lake level.

4. A preliminary examination report, of August 6, 1900, is print in Annual Report of the Chief of Engineers for 1901, pages 313 3134, and in House Document No. 104, Fifty-sixth Congress, seco session. A preliminary examination report, of May 29, 1909, printed in House Document No. 210, Sixty-first Congress, seco session.

[1] Not printed.

The object of this preliminary examination, as stated in the act, with a view to closing the gap in the south revetment." There roperly speaking, no gap in the south revetment; that is, no por- of the south side of the channel is without a revetment, but there jog in the alinement where the private revetment, belonging to Pere Marquette Railroad Co., and forming the car-ferry slip, back from the adjacent Government revetment at either end and ns this portion of the channel. This is clearly shown by the mpanying tracing and photographs.

The reason for this preliminary-examination report is found in solution adopted October 21, 1912, by the council of the city of kegon and submitted to the Hon. James C. McLaughlin, Member ongress, under date of October 25, 1912. The following is a of the resolution:

> *Resolved*, That the mayor and council, also the city attorney, address a communication to our Congressman to take action in the matter of constructing a on the south side of the channel at the place formerly used for the car- slip as the walls are going to pieces and the action of the water is under- ng the roadway, thereby making it impossible for teaming, etc. This im- ement would complete the pier from Lake Michigan to Muskegon Lake lo away with the unsightly wreck that is rapidly going to decay, and pro- he roadway along the channel.

copy of this letter is inclosed.[1]

The matter of closing the gap in the south pier was referred to office for report by department letter of December 11, 1912, which ed that Representative McLaughlin had brought the question to attention of the department. A preliminary report was sub- ed to the Chief of Engineers under date of January 2, 1913, and ore complete report, copy herewith, under date of February 25, . This report describes the locality, its use as a terminal by the e Marquette Railroad Co., the construction of the car-ferry slip 897, the condition of the railroad revetment and the shore line of same at the present time, and the effect of wash through the tment upon the highway.

The location of the structures forming the car-ferry slip are in the limits of block 7 of the village of Laketon, which was inally platted in 1869. From an abstract of title to entire block 7 of the village of Laketon, now part of the city of Muskegon, nished this office by the Muskegon city officials under date of gust 23, 1913, the title to block No. 7 rests in the Central Land Co., orporation of Michigan, which is the holding company of the e Marquette Railroad Co. An enlarged and corrected plat of village of Laketon, recorded August 17, 1881, does not seem to age block 7 of the original plat, according to the above abstract. s title to block 7 makes the railroad company, through the hold- company, the riparian owner along the car-ferry slip and re- nsible for the revetment along this frontage.

It is not considered advisable to close the gap by joining on a ight line the two existing parts of the south revetment constructed the Government for several reasons: First, the work would have e carried through deep water, making it very expensive; second, s desirable to retain the present bight, as the effect of it is to

[1] Not printed.

reduce the force of waves coming in from Lake Michigan; third railroad company would probably allow this construction across face of its slip only on the expressed understanding that at time the company sees fit to rebuild or improve its facilities at point, and such work requires the removal of the above exten of the Government pier, the company may have the privilege o doing at its, the company's, expense.

10. The revetment in front of the railroad company's prop should be repaired at once in the interest of the railroad itself in the interest of the city of Muskegon to protect the high But navigation interests are not now affected and are not likely t until some portion of the private revetment is breached, in w case a large washout in the rear will quickly follow and the e revetment soon become unserviceable. It is far from certain, l ever, even in that case, that the added cost of maintaining the c nel would be such as to justify the cost of rebuilding the revetn including that of securing the necessary land title. In view of above, the locality is, in my opinion, not worthy of improvemen the General Government at the present time.

11. At the present time repairs could be made at a trifling exp compared with the cost of a new revetment, which would make structure serviceable for a number of years. It is believed that city authorities could easily secure permission from the Pere M quette Railroad Co. to repair the latter's revetment so as to pr the highway, or could secure possession of the unused rail frontage, including the revetment.

12. There are no questions as to terminal and transfer facil water power, flood protection, or related subjects connected with examination.

13. In accordance with the directions of paragraph (*e*), pa of Circular 12, series of 1911, notice has been sent to parties kn to be specially interested in the proposed improvement that Board of Engineers for Rivers and Harbors should be furnished any further statement or argument which they desire to make copy of the notice is herewith.[1]

J. C. SANFORD,
Lieutenant Colonel, Corps of Enginee

[1st indorsement.]

OFFICE DIVISION ENGINEER, LAKES DIVISION,
Buffalo, N. Y., October 7, 19

To the CHIEF OF ENGINEERS:

1. The westerly section of the United States, south pier of present project, adopted in 1902, terminated at the then exis warehouse of the Pere Marquette Railroad Co., shown at "A" or map herewith.

2. As stated in paragraph 4 of copy of letter of the district of dated February 25, 1913, hereto attached:

The bank protection in front of and the foundation underneath the house were eroded by the sea and the warehouse was removed in 1904, the road company making no effort to maintain this bank protection. This r

[1] Not printed.

the extension, in 1906, of the Government revetment for about 300 feet
ey to protect the channel at that point.
h extension is in whole, or largely at least, in the private property of
o: 7," and established a precedent for the petition now made for "closing
gp in the south revetment."

For reasons stated in paragraphs 8, 9, 10, herein, it is not con-
e d advisable or necessary in the interests of navigation to follow
tis precedent, and the views of the district officer are concurred
tat Muskegon Harbor is not worthy of improvement by the
n al Government by closing the gap in the south revetment.

J. G. WARREN,
Colonel, Corps of Engineers.

or report of the Board of Engineers for Rivers and Harbors see
r 2.]

SUPPLEMENTAL REPORT ON MUSKEGON HARBOR, MICH.

UNITED STATES ENGINEER OFFICE,
Grand Rapids, Mich., February 25, 1913.

o: Lieut. Col. J. C. Sanford, Corps of Engineers.
: Chief of Engineers.
ect: Closing gap in south pier, entrance to Muskegon Lake.

Referring to my preliminary report of the 2d ultimo on subject
sing gap in south pier, entrance to Muskegon Lake," I would
hat the general manager of the Pere Marquette Railroad Co.,
S. H. Alfred, has (after two letters had been written him urging
) furnished me a statement regarding the property rights of his
pany at the locality, reading as follows:

chief engineer has been looking into this matter and finds that the rail-
company did, and does still, own practically all of the land at this place.
is laid out as a street, called Water Street, is not used to any extent by
ody. This block of property is not within the corporate limits of Muskegon,
s it incorporated in any other way.
have not used this slip for a number of years, but it is possible that we
want to operate our ferries from this point again, in which event we would
ld the slip. In the meantime I am willing to recommend to our receivers
we permit the Government to extend its pier across the face of this slip
e expressed understanding that at any time the railroad company sees fit
build or improve its facilities at this point, and such work requires the
val of the above extension of the Government pier, it may have the
lege of so doing at its, the railroad company's, expense.

In connection with the third sentence in above statement, it
ld be stated that a copy of an official map of the city of Muske-
which is on file in this office shows all this property as within
city limits.

Prior to 1906 the Pere Marquette Railroad Co. occupied the
h side of the entrance channel to Muskegon Harbor for a length
bout 945 feet, measured in a straight line, or a length of about
0 feet following the shore line. The westerly 300 feet was used
freight terminal for package freight connecting rail and water
ic and was provided with a warehouse about 260 feet by 40 feet.
easterly 600 feet prior to 1897 was an inclosed water area in
form of a bight from 80 to 140 feet wide, which had been used
log-boom inclosure in connection with a sawmill. In 1897 the

railroad company constructed a car-ferry slip in the old log-b area, removing the piles which had formed the outer limit and structed a round-pile and sheet-pile revetment following appr mately the shore line.

4. The bank protection in front of and the foundation undern the warehouse were eroded by the sea, and the warehouse was moved in 1904, the railroad company making no effort to main this bank protection. This necessitated the extension in 1906 of Government revetment for about 300 feet easterly to protect channel at that point. This extension also protected the adja railroad property, preventing the track to the car-ferry slip f being washed out. The car-ferry slip has not been used since year. The revetment around the shore in the bight has been in condition for some time, although still intact, and the wave ac through it has eroded the bank to a considerable extent and un mined the adjacent track and also the wagon road, which for eral hundred feet is close behind the revetment. During the season the Muskegon city officials have made some repairs to wagon road.

5. It is presumed from Mr. Alfred's statement that the railr company purchased the land around the bight from the former o ers, who, it is presumed, were the owners of the sawmill above m tioned. I know of no way by which the railroad company coul required to maintain this site in such a way as to prevent mate from the bank being carried into the channel.

6. It is my understanding of the law that the riparian rights of railroad company are such as to prevent the Government from c ing the gap except by permission of the company. I judge from Alfred's letter that the company does not expect to repair the re ment at the present time.

7. As stated in my preliminary report, the navigation inter are not now being seriously affected by the bad condition of revetment. If the revetment were to be properly repaired and ma tained, which would be far less expensive than the closing of the in a straight line, it is thought that there would be no necessity, many years at least, of considering the latter work. It is noted t the river and harbor act reported by the Senate Committee on C merce contains an item providing for a preliminary examination this locality. As it is my understanding that the matter of clos the gap was probably brought up by the municipality or citizens Muskegon on account of the damage which has occurred and threatened to the road along the bight, an investigation will be m in connection with that report, if provided for in the river and har act, as approved, as to the legal status of this road and as to whet or not the local authorities should not for the protection of the r repair the revetment in front of same. From what is now known the matter, the closing of the gap is much more important for protection of private property than in the interests of navigation.

J. C. SANFORD,
Lieutenant Colonel, Corps of Engineers

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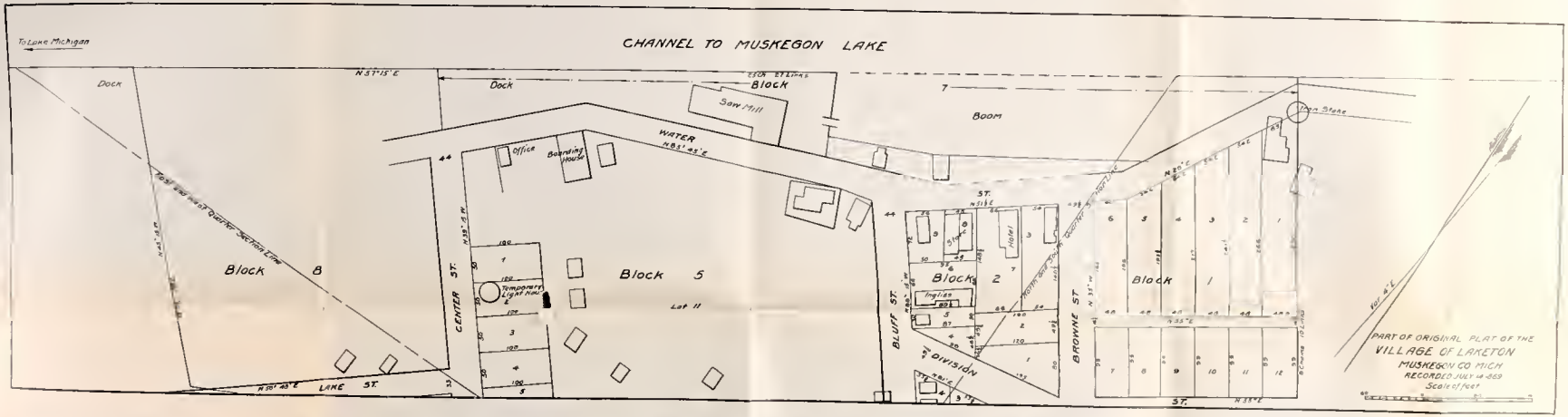
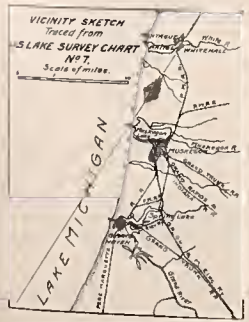
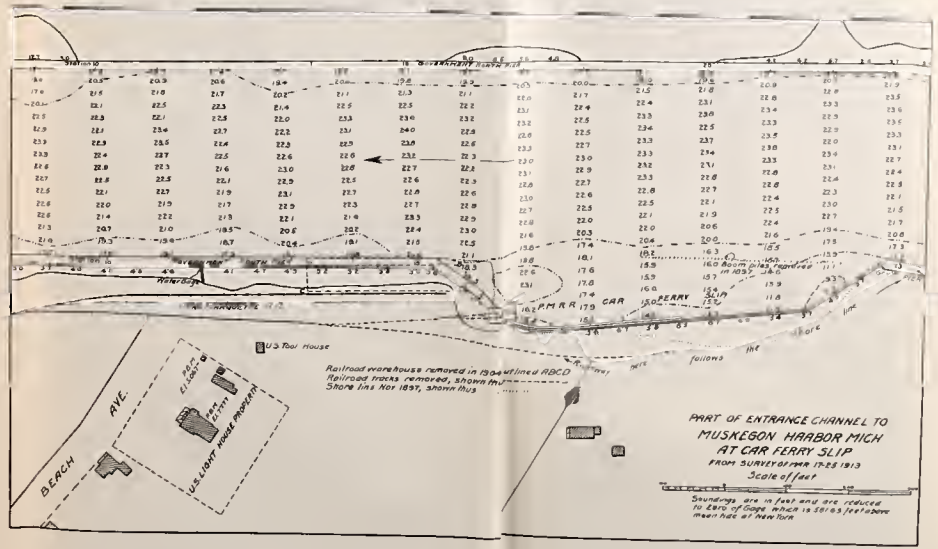
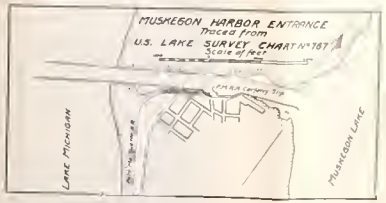
WAR DEPARTMENT

CORPS OF ENGINEERS, U.S.A






Water Boy
Marquette
CAR FERRY SLIP
PERRY
U.S. Tool House
Railroad warehouse removed in 1904 outlined ABCD
Railroad tracks removed, shown thus
Shore line Nov 1897, shown thus
BEACH AVE.
U.S. LIGHT HOUSE RESERVATION
PART OF ENTRANCE CHANNEL TO
MUSKEGON HARBOR MICH
AT CAR FERRY SLIP
FROM SURVEY OF MAR 17-25 1913
Scale of feet
Soundings are in feet and are reduced to Zero of Gage which is 581.63 feet above mean tide at New York



MUSKEGON HARBOR MICH.

SHOWING PORTION OF ENTRANCE CHANNEL OCCUPIED BY

PERE MARQUETTE RAILROAD CO.

U.S. Engineer Office,
Grand Rapids, Mich, Sept 11, 1913

Approved

Lieut Col, Corps of Engrs, U.S.A.

To accompany report of Sept. 16, 1913, to the Chief of Engineers

House Doc. No. 352; 63d Cong., 2d Sess.